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Reflection on the CEMS Business Project - Review and structuring of the Depositary Service for Investment Funds for BPI

Alternative UCITS: an analysis of UCITS Hedge Funds

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Abstract

This paper makes a reflection on a CEMS Business Project performed to BPI with the aim of understanding how can it increase its business as a depositary leveraging on its current structure and IT platforms. I start make a quick overview of the problem, client and industry. Then, I expose how we defined the problem, the methodology, the analysis and also the final recommendation that was presented to the client in the form of a business plan. After, I reflect on my personal contribution to the final output. In order to link the Business Project to my Masters of Science I perform a comparison of UCITS funds with Hedge Funds, concluding that the former have a lot of potential to grow given the clear advantages they present in comparison to the latter. Lastly, I reflect on my strengths and weaknesses, how they have influenced the project and how they have improved with it.

Keywords:

BPI, Depositary, UCITS and Hedge Funds.

Table of Contents

1. CONTEXT	4
1.1-CLIENT	4
1.2. MARKET OVERVIEW	4
1.3 CURRENT SITUATION	6
1.4 THE BUSINESS PROJECT CHALLENGE	7
2. WORK DONE	8
2.1 PROBLEM DEFINITION	8
2.2 METHODOLOGY	8
2.2.1 Hypothesis	9
2.2.2 Methodology	9
2.2.3 Analysis	11
2.3 RECOMMENDATION TO THE COMPANY	14
2.4 CONCERNS	17
2.5 INDIVIDUAL CONTRIBUTION	18
3. ACADEMIC DISCUSSION	22
3.1 POSSIBLE LINKS BETWEEN THE BUSINESS PROJECT AND THE MSC IN FINANCE	22
3.2. ACADEMIC DISCUSSION	22
4. PERSONAL REFLECTION	27
4.1 PERSONAL EXPERIENCE	27
4.2 BENEFIT OF HINDSIGHT	28
REFERENCES	29
APPENDIX	31

1. Context

1.1-Client

The challenge that was presented to the Business Project (BP) team was to explore an opportunity for the depositary service of *Banco Português de Investimento* (BPI).

Banco BPI belongs to the BPI Group, which is a financial group focused on corporate and retail banking businesses being its two main markets Portugal (where BPI has a solid competitive position) and Angola (through its stake in the Angolan bank *Banco de Fomento Angola*, BFA). Its internal structure is divided in six units that can be found in detail in Appendix 1. It is one of the five largest Portuguese financial groups with 44bn euros in assets, 34.6bn euros from client resources and a credit portfolio of 28bn euros. Its market share in loans and resources is of 9%, while in Asset Management is above 23%. The group has 8 600 workers, 847 commercial units and serves 3 million clients. Its main shareholders are CaixaBank (44.10%), Santoro Financial (18.58%), Allianz SE (8.4%), Violas Ferreira Financial (2.68%) and Banco BIC (2.3%).¹

The bank is the central entity of the BPI Group providing a broad range of banking services and products. It offers depositary services through a unit called BPI DOIF (Financial Instruments Operations Department). DOIF is divided in five services (Appendix 2): Fund Administration, Valuation and Compliance, Custodian Services, Settlements and Middle-office, and Projects.

1.2. Market Overview

As mentioned before, the BPI group is the one of the five largest financial groups in Portugal (the others are *Millennium BCP*, *Caixa Geral Depósitos*, *Santander Totta* and *Novo Banco*). As for the depositary services, which was the function being examined in the Business Project, my group did a more in-deep analysis.

Starting with the global market, right now there are 50 trillion euros in Assets under Management (AUM), which is a relevant number since the fees collected by depositaries are

¹ As of 31/03/2016

based on AUM as a fixed % fee as well as often times on a transaction-based model. As for competition, it is a very concentrated industry with the four largest players (all US-based institutions: BNY Mellon, State Street, JP Morgan and Citigroup) accounting for nearly 2/3 of all AUM.

As for the European Market, according to a report of the European Fund and Asset Management Association (EFAMA) there were 13 trillion euros in AUM in 2014. From the total amount, 33% are tied to equity instruments, 43% to bonds, with 8% cash/money market instruments and 8% to other financial instruments. The UK accounts for 37% of AUM, followed by France with 20% and Germany with 10% (Portugal has approximately 74 billion EUR). European Assets under Management have grown with a CAGR of approximately 5% annually. Regarding the types of investors: 74% of assets are coming from institutional investors (39% insurance, 33% pension funds, 3% bank, 25% other institutions), and 26% from retail investors.

Lastly, for the Portuguese market, the analysis was based on data from the *Associação Portuguesa de Fundos de Investimento, Pensões e Patrimónios* (APFIPP) and was focused on a specific type of mutual fund (UCITS²) because the BP challenge was around them. After analysing the current entities that manage UCITS in Portugal, one can see that the four biggest players are linked to 4 of the 5 biggest Portuguese commercial banks: *Caixagest* to *Caixa Geral de Depósitos*, *BPI Gestão de Activo* to *BPI*, *IM Gestão de Activos* to *Millennium BCP* and *Santander Asset Management* to *Santander Totta* (Appendix 3). These four biggest managing entities have together a market share of 86%, being the remaining 14% distributed by 12 small players. Regarding the depositaries that act in the Portuguese market, besides the four aforementioned big banks (86% of the market), there are eight more players in this market (Appendix 4) that jointly count for 14% of the AUM in Portugal.

² A UCITS is a mutual fund based in the European Union. UCITS stands for “Undertakings for Collective Investment in Transferable Securities” and UCITS funds can be sold to any investor within the European Union.

1.3 Current situation

The situation that was in the origin of the challenge proposed to my BP team was the recent legal and regulatory changes relative to the roles that the depositary is supposed to perform (namely a higher responsibility and duties in auditing the activities of asset management institutions). Therefore, it was not an internal event of BPI originating the project, but rather an industry event that BPI should look at as an opportunity to boost its depositary services.

Regarding this regulatory change, I find it appropriate to split in two parts: European Law and Portuguese Law. Starting with the European Law, as mentioned before, the focus of the project was on the UCITS, therefore the document that most affects the depositaries of these funds is the UCITS V (Directive 2014/91/EU). This directive regulates the UCITS on the following topics: Depositary, Remuneration of UCITS Manager, Sanctions and National Harmonization. The most important changes were those relating to the role of UCITS depositaries³. These changes covered various duties of depositaries:

- **Oversight** (e.g. calculation of the net asset value, NAV, at the issuance, repurchase, redemption, alienation and termination of registration of the units; control the calculation of the NAV and ensure that the income of the UCITS is applied in accordance with applicable national laws and fund rules);
- **Cash Flow Monitoring** (e.g. apply the principle of segregation of client's money from the depositary's own funds);
- **Safekeeping** (e.g. Hold custody of all financial instruments that can be registered in a financial instruments account opened in the depositary's books and all financial instruments that can be physically delivered to the depositary; provide a comprehensive

³ A UCITS depositary is an entity that is independent from the UCITS fund and the UCITS funds' investment manager. The depositary essentially acts both as a supervisor of the fund, overseeing certain fund transactions and as a custodian over the fund's assets. In addition, a depositary retains for safekeeping the assets in which a UCITS invests and thus maintains the UCITS' and its investors' property interests.

inventory of all assets of the UCITS on a regular basis to the UCITS or the Management Company).

Regarding the Portuguese Law, the team's analysis focused on the changes of three main documents: Law nº16/2015, CMVM Regulation nº2/2015 and Decree Law nº7/2015. The two first documents confirmed the idea that Depositaries have now more responsibilities and duties, confirming in that way what the European Directives brought. The Decree-Law represents a change in the tax regime of UCITS in Portugal. The main modification is that now the funds are tax-exempt, as the tax is paid by investors in their home countries, avoiding in that way the double taxation that foreign investors were subject in the previous regime.

1.4 The Business Project challenge

The BP project intended to analyse how the depositary services industry have changed with the recent regulatory changes, and how can BPI take advantage of it by leveraging on the structure and IT platforms already in place. The analysis was more qualitative than quantitative since the data regarding, for example, the margins of BPI DOIF and of the industry was not made available for the group, making the calculation of different profitability scenarios very difficult.

2. Work done

2.1 Problem definition

In order to define the problem and develop a methodology to solve it, the team used a McKinsey

Problem Solving Process⁴ (McKinsey, 2007). This process is divided in six different items:

1. **Perspective/Context:** in which we analysed the recent changes in EU law and in Portuguese regulation;
2. **Basic question to solve:** How can BPI depositary services increase its business volume by leveraging on the structure and IT platforms already in place?
3. **Criteria to success:** legal framework analysis (EU and national) for depositary and custodian services, and market analysis;
4. **Scope for solution and space and/or constraints:** focus on Portuguese UCITS; however, the possibility of establishing a Hub for depositary services in Portugal may enable the expansion of BPI services to foreign customers;
5. **Barriers to impact/challenges:** use of existing IT and HR resources, lack of resources (BPI's financial and HR constraints), the capacity to outreach new customers;
6. **Decision makers & other key stakeholders:** Academic and Business advisors (Prof. Doutor Duarte Pitta Ferraz and Dr. José Nuno Sacadura), DOIF Management and other professionals from the investment funds management environment (e.g. from BPI Asset Management, APFIPP and CMVM).

2.2 Methodology

In order to better analyse the methodology followed in the BP, I will divide this section in three different subsections: hypothesis, methodology and analysis.

⁴ Presented by Nicolas Constantinesco in the CEMS Seminar "Introduction to business problem solving".

2.2.1 Hypothesis

In the origin of this whole project, there were obviously some hypotheses that guided our work.

The first one had to do with the possibility of Portugal becoming a hub for foreign investments given the regulatory changes and the specific characteristics of the country in comparison to its peers (especially Luxembourg). Verifying this hypothesis could mean an increase of foreign capital in Portugal and, thus, a possible raise of business for Portuguese depositaries.

However the main hypothesis that was studied in the project was if BPI would be able to increase its revenues as a depositary by leveraging on its current IT platforms and structure, taking into account all the recent changes that have been happening in this market.

In regard to hypotheses, it is important to mention that these two were the ones that guided the whole process. However, in the moment in which the team was defining the strategy to propose to BPI, different specific hypotheses were raised, which will be detailed later.

2.2.2 Methodology

The work plan followed was divided in six phases. For first one, the priority was to analyse BPI as a depositary, the changes of the EU regulation for investment funds and depositary services, the changes in Portuguese law (especially of the taxation of UCITS), and, lastly, the depositary services on a Global, European and National level. For this phase, the team performed independent research using robust sources from public and private institutions.

Then, the team started having the first interviews with experts from the industry and has made problem-oriented adjustments of the analysis based on the feedback from those interviews. So, these two first phases were essentially dedicated to make research on the topic. Concerning the research methods used, the team used two main types of methods: Quantitative and Qualitative.

In the first, one can include all the data collected from official sources like websites and papers from both public and private institutions. Some examples of it are the directives from the European Union, the 2014 annual report of BPI, Portuguese laws and decree-laws, Informative

Note from two law Portuguese Law Firms (*PLMJ* and *Telles de Abreu Advogados*), reports from Big Four companies about European legislation, CMVM regulations, data about the Portuguese depositary industry from APFIPP, and data of the European depositary industry from EFAMA. Most of the information collected is public, however we also had access to some confidential data, which was absolutely crucial to execute the project.

As for qualitative methods, the main sources were ten Interviews with Experts of this industry that we held during the whole project. Besides BPI, the team interviewed four other institutions: BPI Asset Management, APFIPP, CMVM and Interbolsa (Appendix 5). These interviews gave us very important insights from different perspectives: the depositary itself, the client, the regulator and the association responsible for investment funds in Portugal. The aim of all these meetings was to clarify any questions we had, to adjust the analyses that were made until then and to get insights about this industry.

After this, we elaborated on the most relevant topics, analysed the data collected so far and identified the major opportunities and threats to BPI (phase 3). Subsequently, we identified some potential strategies and came up with the pros and cons of each (phase 4).

After weighting the pros and cons of each strategy and discussing them with experts, we eliminated the undesirable ones and conducted the implementation strategy of the proposed strategy (phase 5). Some of the Interviews with Experts were also extremely useful in choosing the final strategy, namely with APFIPP, with Interbolsa and with BPI. This phase was dedicated to develop a Business Plan for BPI with the proposed strategy and the respective implementation. In terms of the methodology followed to come to the solution proposed, the team adapted the Strategy Pyramid of Vaughan Evans (Evans, 2012). It has the internal analysis and the business aims as a foundation for the external analysis, which together sustain the strategy proposed and the implementation (Appendix 6). In the internal analysis, one should get

to know the business, strengths and weaknesses of the corporation, and the aims of the plan. As for the external analysis, the priority should be to get to know the industry, and the main opportunities and threats. Regarding the strategy, the priority should be structuring the opportunities that align with the strengths of the company, being aware of the threats and weaknesses. Lastly, the implementation should include the action to implement the strategy, a timeline and a re-valuation.

In final step of our work plan (phase six), we delivered the final report to the advisers and to the bank, and held a presentation in BPI's Lisbon office to several employees from the bank.

2.2.3 Analysis

In this section, it will be presented the most important take-aways from the analysis performed during the different phases explained above.

In the two first phases, most of the analysis came from the research made. Starting with the internal analysis, i.e. about BPI DOIF, it is important to note that the interviews the employees of this institution gave us a good perception of the internal processes, while the interviews with BPI Asset Management gave us a view from the client perspective.

According to the data from APFIPP, BPI DOIF is the second largest provider of depositary and custodian services in the Portuguese market. As said, it is organized in five departments (Appendix 2), which work together to offer full depositary and custodian services. Its only client⁵ is BPI Asset Management, which holds around €12 billion in assets where around EUR 2.6 billion are in UCITS. Comparing to other banks, BPI's business model seems to focus on a lower turnover in employees and recruit fewer young graduates than for example BNP Paribas. This must have a positive impact on the performance of the employees, but also increase costs. A very important aspect of the internal analysis was to assess what would be the impact of an increase in

⁵ It has other two other customers. However, they are of minor size.

AUM on the internal processes of BPI DOIF. Two main conclusions were made: an increase in workload due to more AUM would lead to a small increase in HR resources (20%), however the labour force would need to increase its working hours significantly since the working hours per week would increase around 50%.

Concerning the external analysis, we focused our research on three main topics: EU law, Portuguese law and market environment. To make this analysis, we relied on all the interviews and various quantitative resources (like reports from APFIPP and EFAMA). The main take-aways from this research were that custodians are getting more responsibility and need to cope with higher costs, UCITS funds in Portugal became tax-exempt, the perceived robustness of the custodian (followed by the price and service provided) is the most important factor for clients of these services, there may be an increase in the AUM related to UCITS due to the European economic recovery and to the tax change in Portugal, the Portuguese custodian and depositary service is dominated by four large players (and BPI is one of them), and, lastly, there are several small asset managers (which jointly represent 14% of the AUM) that are not tied to any of these big depositaries and, thus, should be seen by BPI as potential clients. From the analysis on the Portuguese market, we also performed a comparison against other countries and studied the rationale behind the decision of BNP moving a lot of its back-office services to Portugal. The main conclusion from this analysis was that Portugal has potential to become a hub due to two main reasons linked to its labour force: more educated/skilled than countries like India and Poland (usual destinations of administrative tasks related to investment fund), but relatively cheaper than other European countries (like Ireland and Luxembourg).

On the next phase (three), we elaborated on the most relevant research collected in the first two sections and performed a SWOT analysis of BPI DOIF (Appendix 7), from which one can highlight the strength of having spare capacity with the flexibility to increase customer services

without adding significant resources, the weakness of having a disadvantageous credit rating, which may hamper the attraction of foreign clients, the opportunity of getting the clients of small Portuguese players that will struggle with the increased costs that will result from the amplified duties defined on the new national and European regulation, and, lastly, the threat of having other large Portuguese depositaries aiming at the same customers as BPI as it could lead to a price war.

After doing this thorough analysis, we were able to find various commercial opportunities for BPI (phase four). The team structured these hypotheses through a decision tree based on the MECE principle (Appendix 8). It started with the question that guided the project: How can BPI offer custodian services by leveraging on existing systems? Then we divided in two main options: grow customer base and maintain customer base. Departing from this first division, we ended up with six hypotheses for the first and two hypotheses for the second. From these eight, the team selected four and analysed how they could benefit BPI and their viability was discussed with BPI's employees, but also with people from other institutions related to the depositary industry. The four hypotheses were: 1. Organic growth, focusing on new funds; 2. Aggressive strategy ("stealing" clients from other big depositaries); 3. Target smaller banks where BPI can offer a better price and service; 4. Focusing on former colonies, both existing and new funds.

After raising the four hypotheses presented in the last subsection, the team ended up selecting the two that seem the most efficient and viable and proposed a strategy to BPI based on them (phase five). The proposal was, thus, based on the following opportunities: 1. Target smaller depositary banks and offer to do the services for them; 2. Find a market segment to focus on organic growth of new funds. The reasoning behind this decision is fully detailed in the subsequent subsection.

All in all, we followed a sequential path in which the findings from one phase were the base for the next one. While the first analysis relied a lot on the our own research and on the knowledge

of industry experts as we were getting closer to the final recommendation, the analysis started to rely increasingly more on the our own reasoning and problem solving skills.

2.3 Recommendation to the company

As said, the proposed plan mixed two of the strategies that were initially raised. In the first strategy (target smaller depositary banks and offer to do the services for them), the reasoning was that there are many depositaries in Portugal with a very small scale and, consequently, may be due to run inefficiently. The team did not consider the big players (*Caixa Geral de Depósitos*, Santander and *Millennium BCP*) as targetable since they have roughly the same size as BPI and their sole clients are entities that belong to the same group as the depositary, just like BPI Asset Management belongs to the same group as BPI DOIF. BPI can not only offer depositary services at a lower price, but having an external depositary gives also an extra “audit” of the funds on a daily basis. BPI is perceived as a trustworthy and safe bank in Portugal, and fulfils the “requirements” for a depositary. From our perspective, this can be a quick and efficient way of extending its customer base. All the eight small depositaries count for 1 566.3 million euros (56% of what BPI has right now), however if we take out Novo Banco and Banif Investimento (whose future is very unpredictable) the full amount is of 918 million euros (32%).

The second one (find a market segment to focus on organic growth of new funds) comes as a response to two downsides of the strategy of aggregating funds from small players: the switching costs and the fact that the number of possible banks to target is limited. As said in the last paragraph, BPI has a good reputation and the competencies to target new types of funds. After discussing this topic in some interviews, the team suggested that BPI should focus on families’ funds. A common type of family funds are the collective investment schemes (also known as investment companies): SICAV (Société d’Investissement à Capital Variable) or SICAF (Société d’Investissement à Capital Fixe). These two types of investment schemes are legal in Portugal

since 2010 (decree law no 71/2010). However, a specific tax regime for them was not created, i.e. these funds were included in the same tax regime as the contractual funds, undermining, in that way, the development of those entities in Portugal. With the new tax regime of UCITS (taxing the investors rather than the fund), these investment companies became also tax exempt on their main sources of revenue (dividends, capital gains and interest), which creates an incentive for wealthy families to invest in this type of funds in Portugal. This would increase the demand for depositary services, which could increase BPI DOIF's business. Therefore, we believe that BPI should definitely look at wealthy families as possible clients – beginning with the clients from the BPI Private Banking - of its depositary services through SICAVs and SICAFs; and having a competent sales team is crucial since they will be responsible for attracting wealthy families both in Portugal and abroad.

To gain from the opportunities found in the strategy section, BPI must take advantage of its strengths, such as being a well-working depositary service provider and having scale within Portugal. Further, DOIF should improve its main weaknesses, which are the lack of sales resources and external IT-systems. By taking a lean approach, with minimal investments and high flexibility, DOIF can minimize the main threat of large international banks offering depositary services in Portugal if/when passports for EU funds become a reality.

In more practical terms, the implementation can be summarized in the following points. (Appendix 9 has a timeline with the proposed plan):

1. **Create a commercial team structured under the “Projects” department of DOIF:** it will give BPI flexibility, and allocating resources for a project might be easier than starting a new department; the team should report to Head of DOIF Carlos Machado directly, but work closely with the whole the department of DOIF;

2. **The team should consist of a mix of operational and commercial experts:** Adding together, the team should possess skills of how DOIF operates, how their IT systems work, B2B and B2C selling skills and also skills about Private Banking. Our suggestion is to have:
 - a. 2-3 experienced employees from DOIF with strong knowledge of all DOIF's operations and systems;
 - b. 2-3 experienced bankers not necessarily from DOIF or BPI or with experience from the depositary industry directly: the most important characteristic is their commercial experience and mindset. Preferably at least one should have a international background with experiences from banking conferences and meetings such as Sibos (Swift International Banking Operations Seminar) or Felaban (*Federación Latinoamericana de Bancos*) Annual Assembly;
 - c. In addition, we see someone from BPI Private Banking to be valuable for this team for targeting wealthy individuals/families;
 - d. As this may become a costly team, the possibility of some of the team members only working part-time on this project should be discussed by DOIF.
3. **“Learning on the job” Approach:** this commercial team should work together to develop a better understanding of the market, and from a commercial perspective, how can BPI offer the best IT and service systems before going to the market. The team should define its targets and how to approach them, make a more detailed business plan and start implementing the needed infrastructures;
4. **Enter the market - target defined banks and potential new funds:** a natural starting point in terms of new funds would be BPI's Private Banking clients;

5. **Evaluate success and adapt:** BPI should analyse various aspects like the changes in demand, the need to increase manpower and/or adapt systems, other big players' actions, the performance of its internal processes and the existence of new opportunities in this market;
6. **Re-evaluate the project and decide for further steps:** after 2-4 years the whole structure of the project should be reviewed by the team, DOIF and preferably other managers from BPI. They should decide depending on the market situation, if it should be extended, decreased in size or change the structure from the Project department to become an independent entity within DOIF. Also, they should assure that the project is still in line with the overall strategy and vision of BPI.

The development of a competent commercial team with outstanding selling skills and having flexibility in the use of resources are two factors absolutely crucial for the success of the plan.

2.4 Concerns

Regarding the main concerns about the proposed strategy, I find it appropriate to recall the SWOT analysis presented in section 2.2.3 (Appendix 7). Although the weaknesses and threats presented in that analysis refer to BPI and its depositary services, the team considered that most of them could also be seen as risks of the proposed strategy.

So, in terms of “internal risks” (weaknesses) one can highlight the relatively high salaries of BPI in comparison to other Portuguese banks, the inexistent experience with other customers besides BPI Asset Management, lack of marketing/sales resources, the fact that the IT-system (Hexágono) is only compatible with internal use at the moment, a disadvantageous credit rating and the ongoing dispute between two major shareholders (*La Caixa* and Santoro Financial) may all represent competitive disadvantages for BPI and should be in the top of the bank's mind when implementing the strategy.

The main “external risks” (threats) are the possibility of other large Portuguese banks following a similar path which may initiate a price war for depositary services, the uncertainty about the Portuguese non-investment credit rating, the uncertainty about demand from international investors and the possibility of creation of European passports for funds as it would benefit global custodians to enter the Portuguese market and win on scale.

The creation of the team is also a source of concern as it may be very difficult and expensive to form a team of experienced staff with very specific skills. The difference in terms of background may also lead to problems within the team, and, thus, hamper the success of the strategy.

2.5 Individual Contribution

In order to reflect on what I have done during the whole process of the Business Project, I will start by exposing my commitment in terms of attendance to group meetings. During this semester, we held regular meetings with our academic advisor at Nova in which we would present our progress and receive valuable inputs from the advisor, and I have participated in all of them. Besides these meetings, the team also held ten expert interviews. From those, I have participated in eight, which shows the high commitment in terms of time I had during the whole project.

Concerning my direct inputs for the project, I would say that my main contribution was the analysis of all the changes in the Portuguese regulation concerning UCITS. I ended up with this part since I was the only Portuguese member of the group, and as most of the documents related to this topic were in Portuguese I had necessarily to do it.

My study focused on analysing three major documents. The first was one was the Law n°16/2015 that was applied on February 24th, and that financial institutions had to start respecting thirty days after. It applies two European Directives (n°2011/61/UE and 2013/14/UE) and is divided in five main titles, being the second title (Entities related to the Undertakings for Collective Investments) the one to we looked at in more detail as it includes a whole chapter about

Depositories, namely its responsibilities. An Informative Note from a well-known Portuguese law firm (PLMJ, 2015) states that this new regulation comes to unify and standardise the regulation relative to undertakings for investments in real estate, securities and other non-financial assets, eliminating in that way the legal asymmetry, usually unjustified, for these undertakings. It points out nine main changes, being one of them the increase of the level of detail of the rules related to the tasks and responsibilities that depositories have to follow.

The second analysis I did regarding this issue was of the CMVM regulation nº2/2015. It was applied on March 2015 and revoked two CMVM prior regulations: nº8/2002 and nº5/2013. This new regulation comes as a response to a wider law that integrates the undertakings of collective investment of the securities and real estate sectors under the same umbrella. By going through the official document, one can see that it is divided in seven main titles (being the information about depositories present in the third title). In order to better understand this regulation and the relationship between CMVM and Depositories, the team had a meeting with two members from the UCITS Management Supervision Department from CMVM. From this meeting, the team was able to conclude that there were two significant changes: 1. Depositories are now obliged to report to CMVM every time there is a breach, which may have an important implication in the profitability of depositories since it may increase costs and, thus, can be a possible competitive advantage for BPI DOIF in comparison to smaller players; 2. CMVM will, from now on, be stricter in applying fines when depositories do not follow the rules.

The last issue covered about this subject was the tax change (Decree-Law nº7). It was published on January 13th, 2015, but it is effective since July 1st, 2015. The goal of it was to increase Portuguese UCITS' attractiveness and, with that, attract more foreign capital. After having two interviews with the Legal and Tax Department of BPI and analysing an Informative Note from another Portuguese law firm (Telles Abreu Advogados, 2015) it became clear that the

Portuguese Government aimed at eliminating the double taxation of the income paid by UCITS investors non-resident in Portugal, which represented a clear competitive disadvantage of Portugal in comparison to, for example, Luxembourg. So, with the tax change there is an opportunity to attract foreign investors and funds, and, thus, new business for BPI DOIF.

The analysis of the Portuguese law that concerns the UCITS was my main contribution to the BP, however I also helped in the other parts of the analysis and in the Business Plan.

Starting with the European Analysis, my contribution had two main elements. On one hand I had to discuss with the element that was responsible for that part about the duties/responsibilities of depositaries, to see how similar were the EU law and the Portuguese law on this concern. On the other hand, there was an analysis about the implementation of UCITS V, in which Portugal was compared to three countries: Spain, Luxembourg and Ireland. My contribution was exactly in filling the information about Portuguese implementation with my analysis of the Law nº16/2015.

For the external analysis, we studied an effect that the tax change may trigger: Portugal becoming a hub for investment funds. For this analysis, I contributed with my specific knowledge about the country in terms of Universities, labour conditions, reputation regarding credit rating, and economic evolution since the sovereign debt crisis. Additionally, I contributed by doing the analysis of the depositary industry in Portugal (main players, market shares and main managing entities) since the main source for this part of the industry analysis was the official website from APFIPP that is all in Portuguese. In this analysis of the Portuguese market, I was the one deriving the conclusions that the market is very concentrated and that there may be an opportunity for BPI to target the small players.

For the Business Plan part, although one member of the group was more focused on it, the whole team helped since it was undoubtedly the most challenging part. Our first idea was not to present the Business Plan in the way we ended up doing it (strategic pyramid). I think I had some

influence in this change since I was not comfortable with the previous structure and after a group discussion we agreed on using the strategic pyramid from Evans (2012). Additionally, I contributed with the part of which depositaries should BPI target, which came as sequence of what I did for the industry analysis. Also, I was responsible for developing the strategy of attracting sources of new funds, which required a deep research on family funds (Schellenberg Wittmer, 2012), more specifically on SICAVs SICAFs and on their implementation in Portugal since 2010 and their tax regime (decree law n° 71/2010).

As explained in the beginning of the dissertation, the team had very limited access to data regarding revenues and costs of BPI DOIF and its competitors, which made the quantitative/financial analysis more complicated. Nevertheless, given my financial background, a member of the group and I performed a scenario analysis in which we predicted the impact of an increase in BPI's business (of 32% getting all the small players besides *Banif-Investimento* and *Novo Banco*, of 58% - getting all the small depositaries, 80% - getting all the depositaries plus some SICAFs and SICAVs), taking into account the respective increases in costs (mainly in HR). Once again, it was very hypothetical since we had no information regarding, for example, the costs with the sales team, the attraction of foreign funds, potential of SICAFs etc. The results of this scenario are presented in Appendix 10. The main conclusion one can take is that the proposed strategy has a lot of potential economies of scale, i.e. as the number of customers increases, the profits per customer (or per dollar under management) will also tend to increase.

All in all, I think my contribution was very comprehensive, as it was not restricted to the part I was assigned to, but also included others' parts. Of course, it was a lot motivated by the fact that I was the only Portuguese speaker of the group, and, thus, the only one capable of analysing sources in Portuguese. In addition, I tried always to be critical (i.e. with a critical eye) when reading the parts done by my colleagues, which, in my opinion, improved the final outcome.

3. Academic Discussion

3.1 Possible links between the Business Project and the MSc in Finance

The purpose of this section is to establish a link between the subject of the Business Project and the MSc in Finance. Various ideas came to my mind during the whole process such as how has Luxembourg established itself as a hub for investment funds in recent years, the possible creation of European passports for funds and depositaries, the evolution and impact of UCITS in the European investment environment since its establishment in 1985, the risk management measures of UCITS funds, the potential of SICAFs/SICAVs funds in Portugal and the performance of UCITS funds (since its creation in 1985 and in comparison to other types of fund, like hedge funds). In the end, I decided to choose the performance of UCITS as the subject for this short academic discussion. More specifically, I will study the performance of UCITS that follow Hedge Funds strategies (alternative UCITS or Hedge Funds UCITS).

3.2. Academic Discussion

Before starting exposing relevant theories about this subject it is important to recall the definition of UCITS. The Undertakings for Collective Investment in Transferable Securities is a mutual fund based in the European Union and “can be sold to investors within the European Union under a harmonised regulatory regime” (BlackRock, 2010). The concept was originated in a Directive from 1985, “UCITS I”. The UCITS funds can only invest in certain asset classes (EY, 2015): Transferable securities (publicly traded equities or bonds, listed on mainstream stock exchanges), deposit and money market instruments, close-ended and open-ended funds, and financial derivative instruments (of which the underlying consists of eligible assets or interest rates, foreign exchange rates or currencies and financial indices). Some examples of assets that are ineligible are: real estate, bank loans, physical metals and commodities.

UCITS funds have the reputation of liquidity, transparency and copious regulation (Macfarlanes, 2015). With the 2008 financial crisis and investment scandals like the one that involved Madoff,

there was an increase in the demand for products with those characteristics, so the overall demand of UCITS increased. Due to this reputation, many managers of offshore hedge funds have been establishing UCITS (the assets in Alternative UCITS grew by more than 30% p.a. since 2008 according to HFMweek, 2015]). Note that establishing a hedge fund-like product was allowed in 2001, with the so-called product directive (2001/108/EC) that allowed the use of derivatives. Several offshore hedge funds, which are unregulated, are being substituted by UCITS hedge funds (Macfarlanes, 2015).

Busack, Drobetz and Tille (2014) present a study of the performance of UCITS funds that follow alternative investment strategies in comparison to offshore hedge funds. There are three significant advantages of this study: it takes into account the survivorship bias; it uses a large set of UCITS strategies and compares with the respective offshore counterparts; thirdly, it delivers a detailed risk-return profile of alternative mutual funds and assesses the possibility of different hedge fund strategies being accommodated into the UCITS framework. Tuchschnid et al. (2010) and Tuchschnid and Wallerstein (2013), who made their analysis of UCITS mainly on an aggregated basis, are other examples of studies on this topic of UCITS performance.

The methodology followed by Busack, Drobetz and Tille (2014) included single-index models and a seven-factor model. The first models made regressions of equally weighted UCITS portfolio excess returns on excess returns of matched hedge fund indexes from the Hedge Fund Research (HFR) using different strategies, e.g. the Equity Hedge and Equity Index.

As for the multi-factor models, a more complex regression was used, while the strategies/HFR indexes were the same as in the single models. The expression used was:

$$= \alpha_i + \beta_{i1,t}W_Mkt_{i,t} + \beta_{i2,t}W_SMB_{i,t} + \beta_{i3,t}CE10Y_{i,t} + \beta_{i4,t}CECSPREAD_{i,t} \\ + \beta_{i5,t}PTFSBD_{i,t} + \beta_{i6,t}PTFSFX_{i,t} + \beta_{i7,t}PTFSCOM_{i,t} + \epsilon_{i,t}$$

$r_{i,t}$ represents the excess returns of equally weighted UCITS portfolios or of hedge fund indexes.

Then, $W_Mkt_{i,t}$ and $W_SMB_{i,t}$ are the Fama French factors of global market and global size,

respectively. Two variables related to the Bond market are used: the 10-year European government bond yield ($CE10Y_{i,t}$) and the change in Euro credit spreads ($CECSPREAD_{i,t}$). The three final variables came from other studies (Fung and Hsieh, 2001, 2004) and account for dynamic trading strategies: one for bonds (PTFSBD), one for foreign exchange (PTFSFX), and one for commodities (PTFSCOM). The objective of this second type of model was to evaluate how different were the exposures of alternative UCITS and hedge funds to these factors.

The main result derived by Busack, Drobetz and Tille (2014) was that UCITS funds offer similar raw returns comparable to non-investable hedge funds and outperform investable hedge funds, and that their volatility is much lower than offshore hedge funds. The single-index models reveal that alternative UCITS funds have a marginal exposure to the variation of hedge fund returns (low R-squares). After analysing the results from the multi-factor models, the authors came to the conclusion that the main risks for alternative UCITS and hedge funds are the ones related to stock market risks, being the alternative UCITS significantly less exposed to them than hedge funds. The roughly same returns and lower volatility goes in line with what Tuchschnid et al. (2010) and Tuchschnid and Wallerstein (2013) have concluded. This gives support to the investors that are replacing their investment in offshore hedge funds by this type of UCITS.

Another positive attractive characteristic of UCITS has to do with the fact that it is easier to market a UCITS fund than an offshore hedge fund in a EU state-member as the hedge fund managers have to assure they are complying with the local regimes in each jurisdiction. Also, the manager of the UCITS has to express the fees he/she earns and the costs incurred in an official document (the “Key Investor Information Document”) turning the whole process more clear and transparent for the investor (Macfarlanes, 2015). Moreover, the higher transparency, the liquidity and the extensive regulation increase UCITS funds’ reputation and perceived safety. Lastly, the Volcker Rule (applied in the US since December 2013) will prohibit many US banks and non-

banks from investing in “covered funds” (as defined by this rule), which will include many alternative funds like hedge funds and private equity funds. According to Fermaud (2014), many UCITS funds will probably be able to avoid being considered covered funds, which may boost the demand for this type of funds in the American market.

In order to better analyse this comparison between Alternative UCITS and Hedge Funds, one has also to review other studies with different conclusions. A more recent study was the one made by Darolles (2014), which also performs a comparison between Alternative UCITS and hedge funds, with a focus on the regulation and in the skill impact (i.e. fund performance). In this study, the author confirms a conclusion also derived by Stefanini et al. (2010) that regulation has a negative effect on returns, as it limits the exposure to certain assets, which may undermine the funds’ performance (in this study, the funds following Global Macro/CTA strategies were the ones that paid the highest “regulation cost”). Appendix 11 presents some data about the regulation impact in different strategies (Darolles, 2014). However, it confirms the idea that Alternative UCITS have a lower volatility than common Hedge Funds. In my opinion, the study of Darolles (2014) has the pitfall of not taking into account the survivorship bias, which may have had an impact on the conclusions taken. Additionally, an article of Stefanie Eschenbacher published in 2010 (Eschenbacher, 2010) points out a potential downside of UCITS hedge funds. The main concern of the author regarding the UCITS hedge funds is that investors may overvalue them. Not all of these funds are simple long/short equity funds, some of them follow more complex strategies (e.g. funds that follow macro and arbitrage strategies), and, thus, there is a risk of mis-selling and misunderstanding. That is, some investors have such a good view of UCITS funds that they may underestimate some of the fund’s risks when they invest in them. More specifically, this concern has to do with “the value at risk (VaR) calculations that managers can use to determine the investments of a sophisticated UCITS fund, instead of using simple

limits on leverage”. UCITS funds managers have to be aware that VaR is a useful tool to measure risk, but it should not be the only one used. There are some UCITS funds using the Commitment Approach, which sets limits to the UCITS funds’ regarding exposure to derivatives (Western Asset, 2011). Adapting this Commitment Approach in the risk measurement of complex (and, thus, more subject to mis-selling) UCITS funds may be a possible solution in some cases. At the time of the analysed article was written, the directive in use was UCITS III in force. Since then, UCITS IV and V were implemented and the parameters regarding the calculation of the VaR were revised, e.g. effective observation period of risk factors of at least one year and obligation to take into account idiosyncratic and default risks.

All in all, UCITS funds, including Alternative UCITS, have been experiencing an increase in demand especially since the 2008 financial crisis especially due their liquidity and strict regulation. Although the copious regulation reduces the volatility of the returns, it imposes various diversification requirements (like no more than 10% of a portfolio concentrated in a single issuer) that may reduce the potential returns the funds may achieve. The potential of UCITS funds is clear and justified, however it would be interesting to study the following issues: how the performance of alternative UCITS will change with the increase in demand they are experiencing (i.e. will the increase in AUM in UCITS funds affect the returns and risk these funds have been getting in recent years?) and also how will the demand for UCITS will change once the financial markets are completely “recovered” from the 2008 financial crisis.

To finalize, I believe this trend of hedge funds managers adopting UCITS may be an opportunity for BPI DOIF, as well. The commercial team that was proposed in the Business Plan, should be aware of this and try to approach some Investment Management companies to convince them in setting up UCITS funds instead of hedge funds and, ultimately, to use DOIF as the depositary of these funds.

4. Personal Reflection

4.1 Personal experience

To finalize this dissertation, I will elaborate on what were, in my opinion, the personal take-aways I took from the Business Project.

Concerning my key strengths that were observable during the whole project, being calm, which is a characteristic I usually show when working in teams, was surely one that stood out. This is a very valuable strength, as I believe that being calm is the best way to obtain a good outcome of the work being done. Also, I tried always to be familiar with the whole project, as I am not comfortable with the idea that “each one should do his/her part and then we merge all those parts into one document”, as I believe the final result may lack of consistency. Therefore, I not only contributed with some new inputs to the others’ parts, but also I revised critically several times those parts. Moreover, I was always completely honest and direct in all the revisions, as this is the way I expect my colleagues acted with me. An additional personal trait that stood out was my supportiveness to my colleagues every time they asked for it and sometimes voluntarily.

As for weaknesses, I believe the first that emerged was the difficulty in getting the motivation to start digging into something I knew very little (Portuguese Law). As my performance depends a lot on my motivation, the first weeks were not very productive due to that lack of motivation. In the beginning, I also struggled in understanding what exactly was relevant for the project and what was not. For example, the law n°16/2015 had more than 256 articles, however less than 10 were relevant for this project. The various meetings (with the advisers and with industry experts) helped me, on one hand, in focusing my research in what was truly relevant and, on the other, in improving my problem-oriented reasoning. In my opinion, I also lacked in being prepared to certain meetings, especially the ones that were more focused on topics in which I was not directly involved.

To improve these downsides, I consider that I should try to reduce this characteristic of working by motivation, since I am absolutely sure I will not enjoy all the subjects in which I will work during my career. In this case, my lack of motivation came from the lack of knowledge about the topic, which can be fought back by, for example, meeting someone familiar with that subject and ask him/her for a broad overview of the topic before starting doing the my own research. In order to better prioritize my work, I think it is absolutely crucial to clearly understand the final objectives/goals of the project, because once it is well defined in my head it is easier to understand what is relevant and what is not. As for the lack of preparation, this was the first experience in which I had a group project that heavily depended on meetings, so the next time I am sure I will be better prepared for all the meetings. To do it, I can, for example, do my own research, speak to the group member focused on that particular topic and/or read the research that was already done by other members of the group.

4.2 Benefit of hindsight

Regarding the area in which I believe I had the most valuable contribution, I consider it was the in structuring the process guided us to the final outcome: a Business Plan for BPI DOIF. That is, I consider I had a decisive role in coming up with the idea of dividing the process in three phases: comprehensive analysis (law, industry and BPI DOIF), proposed strategy and respective implementation. This was, in my opinion, extremely important as it helped us in dividing the work among us and in defining internal milestones.

In my opinion, the team did not reserve the adequate time to the Business Plan. However I believe the final product was clearly positive, I feel that after the thorough analysis that was done, the Business Plan should have been more detailed. To avoid that, I should have checked more regularly how that part was evolving and all the members that were focused on the analysis part should have joined the member responsible for the Business Plan earlier.

References

- 2001/108/EC. 2002. “Directive 2001/108/EC of the European Parliament and of the Council of 21 January 2002”.
- APFIPP. 2016. “Evolução Recente dos Mercados de Fundos de Investimento” *Nota Informativa*
- BlacRock. 2010. “The rise of UCITS III”. *ViewPoint*
- BPI. 2015. “1st half of 2015 BPI Report”
- BPI. 2016. “Overview of BPI Group”. [Presented to the Business Project Team in the kick-off meeting at BPI]
- Busacka, Michael, Jan Tillec and Wolfgang Drobetz. 2014. “Do alternative UCITS deliver what they promise? A comparison of alternative UCITS and hedge funds”. *Applied Financial Economics*
- Busacka, Michael, Jan Tillec and Wolfgang Drobetz. 2015. “Can Investors Benefit from the Performance of Alternative UCITS?”
- CMVM, 2015, “Regulamento da CMVM n.º 2/2015”[CMVM regulation nº2]
- Darolles, Serge. 2014. “Evaluating UCITS Compliant Hedge Fund Performance” Bankers, Markets & Investors (133), 11-22
- Decreto-Lei n.º 7/2015 - Diário da República n.º 8/2015, Série I”, Assembleia da República [Decree Law n.º 7/2015]
- Decreto-Lei n.º 71/2010 - Diário da República 1ª série, n.º 117.” Assembleia da República [Decree Law n.º 7/2010]
- EFAMA. 2015. “Asset Management in Europe, An overview of the Asset Management industry with a special focus on Capital Markets Union”. April 2015
- Eschenbacher, Stefanie. 2010. “Concern as Ucits hedge funds boom”. *Fund Strategy*, (November 2010): 14
- European Union. 2014: “Directive 2014/91/EU of the European Parliament and the Council of 23 July 2014.” *Official Journal of the European Union*
- Evans, Vaughan 2012. *Key Strategy Tools*. Pearson
- EY. 2015. “European mutual Funds – An introduction to UCITS for US Asset Managers”.
- Fermaud, Nicolas. 2014. “UCITS - The New Panacea for US Hedge Fund Managers?” *Investment Lawyer* (May 2014), 21(5):12-21.

Fung, William, David. A. Hsieh. 2009. “Measurement Biases in Hedge Fund Performance Data”; *Financial Analysts Journal*, 65: 36-38.

Fung, William, David. A. Hsieh. 2009. “The Risk in Hedge Fund Strategies: Theory and Evidence from Trend Followers”; *Review of Financial Studies*, 14: 313 – 341.

HFM. 2015. “UCITS 2015”. *Special Report*

Macfarlanes. 2015. “Alternative UCITS – Expanding your investor Universe”

McKinsey. 2007., “McKinsey Staff Paper - The McKinsey Approach to Problem Solving”. Authors: Ian Davis (London), David Keeling (Chicago), Paul Schreier (London), and Ashley Williams (Atlanta). McKinsey & Company, Inc.

PLMJ. 2015., “Novo Regime Jurídico dos Organismos de Investimento Coletivo”, *Notas Informativas*

PWC. 2015a. “UCITS V New depositary role, new remuneration rules for managers, new administrative sanctions.”

PWC.2015b. “Eligibility of nancial instruments for UCITS”

Schellenberg Wittmer (2012). “Private Family Funds: A Swiss Opportunity.” *Schellenberg Wittmer Newsletters*

Stefanini, Filippo, Silvio Vismara, Michele Meoli, Tommaso Derossi (2010), *Newcits: Investing in UCITS Compliant Hedge Funds*, Wiley Finance Series, First Edition.

Telles Abreu Advogados. 2015. “Novo Regime Fiscal dos Organismos de Investimento Colectivo.” *Notas Informativas*

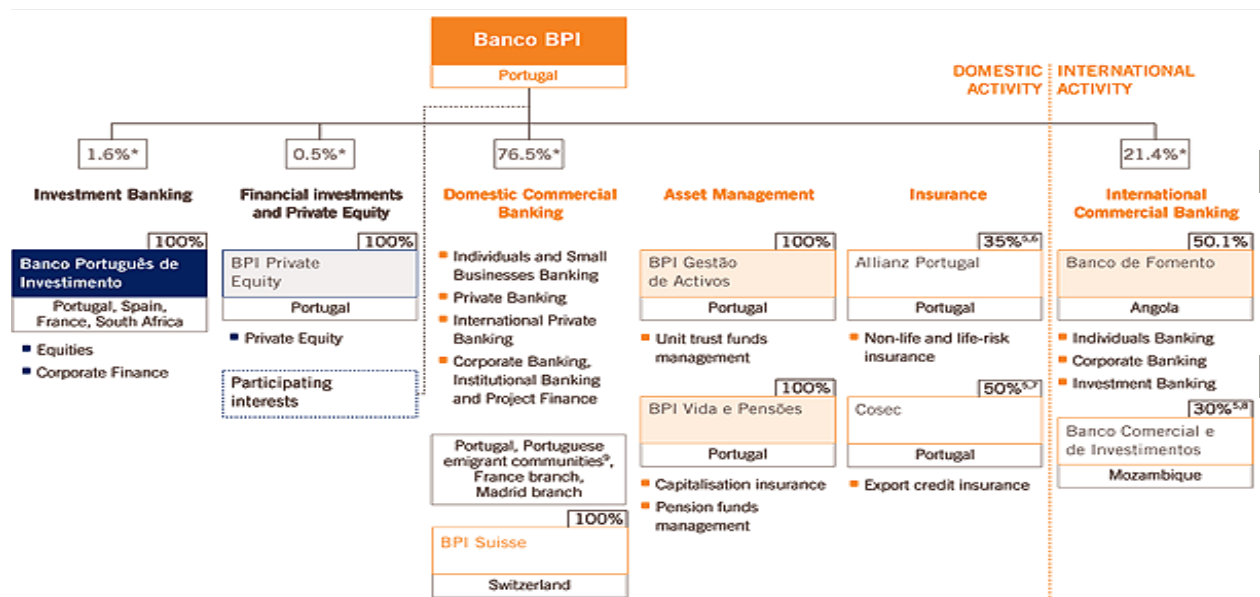
Tuchschmid, Nils S., Erik Wallerstein. 2013. “UCITS: Can They Bring Funds of Hedge Funds On- shore?” *Journal of Wealth Management*

Tuchschmid, Nils, Erik Wallerstein, and Louis Zanolin. 2010. “Will Alternative Ucits Ever be Loved Enough to Replace Hedge Funds?” *Working Paper*, Haute École de Gestion de Genève

Western Asset. 2011. “UCITS IV Risk Requirements: The VaR Approach”

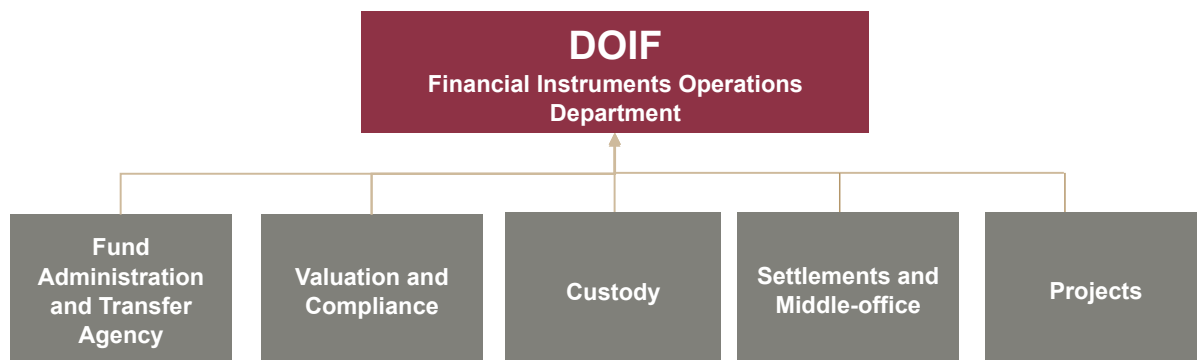
Appendix

Appendix 1 – BPI Group



Source: 1st half of 2015 BPI report

Appendix 2 – BPI DOIF structure



Appendix 3 – UCITS in Portugal

Managing Entities	AUM in Million euros (UCTIS)	AUM (% of Total)
Caixagest	4006.3	35%
BPI Gestão de Activos	2795.4	24%
IM Gestão de Ativos - Millennium BCP	1636.6	14%
Santander Asset Management	1488.9	13%
Crédito Agrícola Gest	336.2	3%
GNB - SGFIM	318.4	3%
Banif Gestão de Activos	310.4	3%
Montepio Gestão de Activos	202.1	2%
Popular Gestão de Activos	151.8	1%
Optimize Investment Partners	78.5	1%
Dunas Capital - Gestão de Activos	52	0%
LYNX Asset Managers	45.1	0%
Barclays Wealth Managers Portugal	30.1	0%
MCO2	19.5	0%
Invest Gestão de Activos	14	0%
Patris Gestão de Activos	8.2	0%
Total	11493.5	100%

Source: APFIPP, 2016

Appendix 4 – UCITS Managing Entities and respective Depositaries

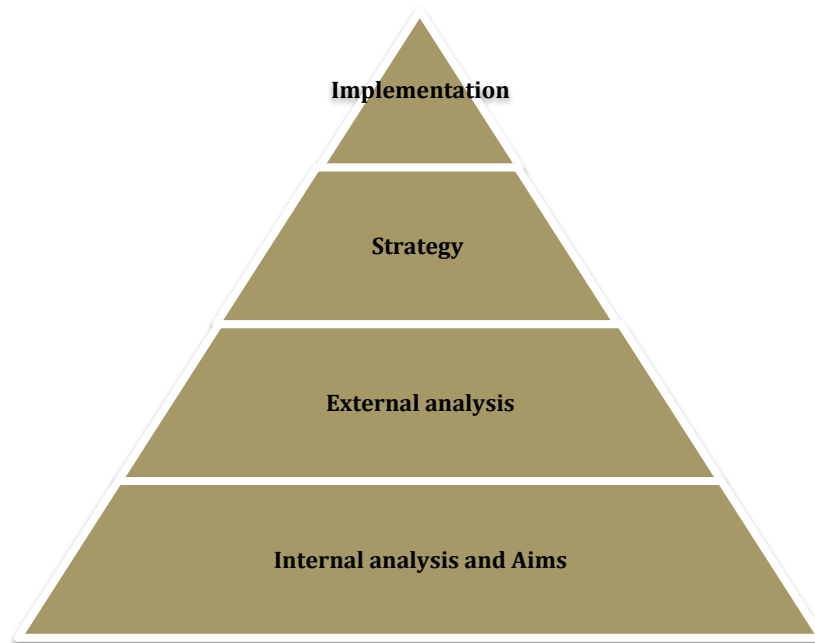
Managing Entities	Depositary
Caixagest	Caixa Geral de Depósitos
BPI Gestão de Activos	BPI
IM Gestão de Ativos - Millennium BCP	Millennium BCP
Santander Asset Management	Banco Santander Totta
Crédito Agrícola Gest	CAIXA CENTRAL – Caixa Central de Crédito Agrícola Mútuo
GNB - SGFIM	Novo Banco
Banif Gestão de Activos	Banif - Banco de Investimento
Montepio Gestão de Activos	Caixa Económica Montepio Geral
Popular Gestão de Activos	Banco Popular Portugal
Optimize Investment Partners	Banco Invest
Dunas Capital - Gestão de Activos	Banco BIC
LYNX Asset Managers	Banco Invest
Barclays Wealth Managers Portugal	Barclays Bank (Portuguese branch)
MCO2	Banif - Banco de Investimento
Invest Gestão de Activos	Banco Invest
Patris Gestão de Activos	Banco Invest

Source: APFIPP, 2016

Appendix 5 – Expert Interviews Summary

Elite Expert Meetings	Number of Interviews	Elite Expert Participants
BPI (Lisbon)	1	9
BPI (Oporto)	1	-
BPI Legal Department/ BPI Asset Management/ BPI Compliance (Lisbon)	3	5
BPI (Lisbon)	1	-
APFIPP (Lisbon)	1	2
BPI Tax Department (Lisbon)	1	3
CMVM (Lisbon)	1	2
Interbolsa (Phone Conference)	1	2
Total	10	23

Appendix 6 – Strategy Pyramid (adapted from Evans, 2012)



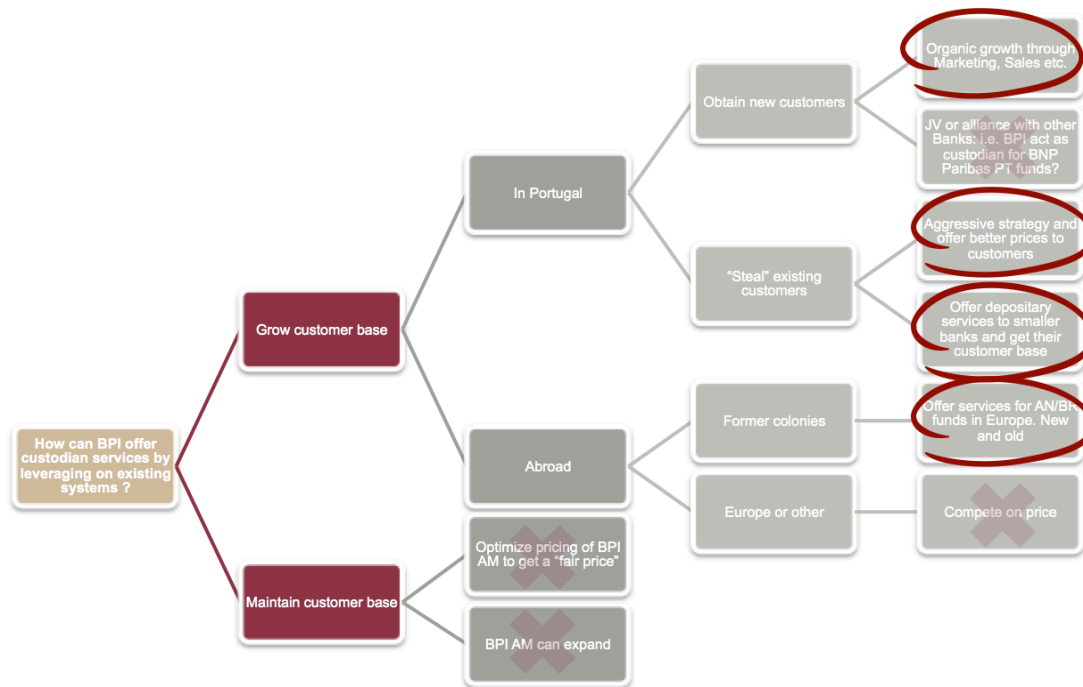
Appendix 7 – BPI DOIF Swot Analysis (as a result of the external and internal analysis performed for the Business Project)

Conclusions from internal analysis

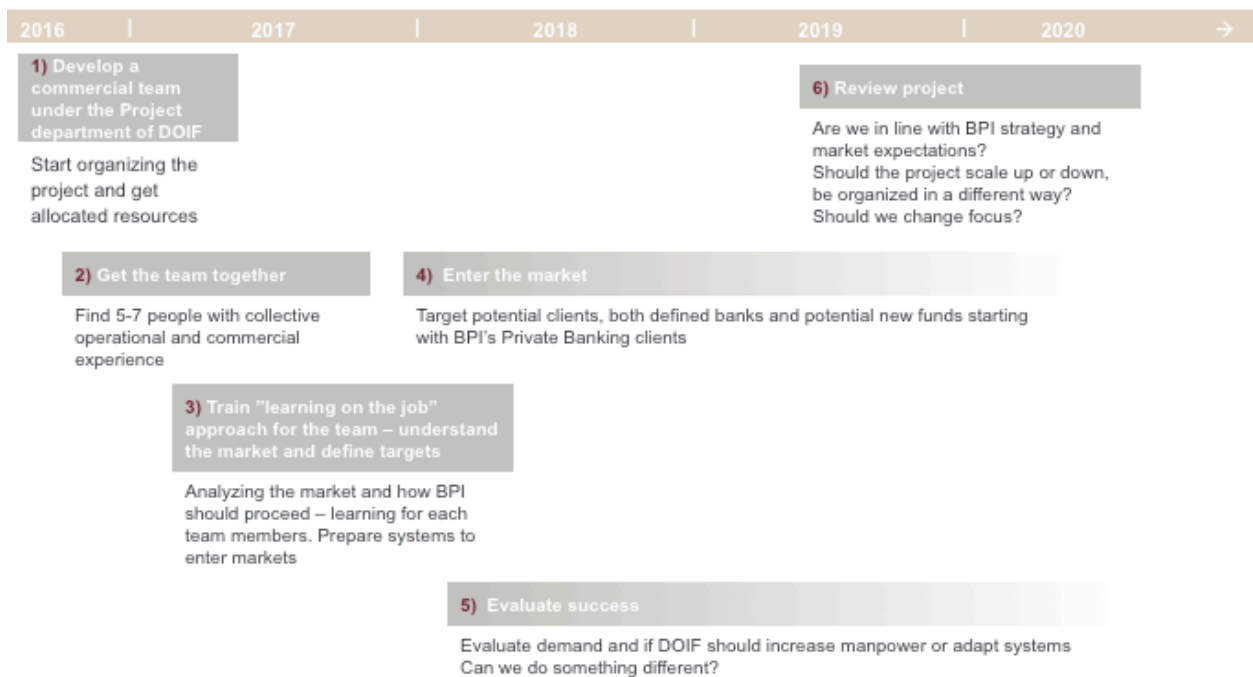
Strengths	Weaknesses
<ul style="list-style-type: none"> » Very strong brand in Portugal standing for reliability and customer service » Strong base of employees (lower turnover) » Experienced and well-working custody and depositary services » Effective IT-systems (e.g. Hexágono system) » Spare capacity with the flexibility to increase customer services without adding resources » Scale in the Portuguese market » Strong connections to important stakeholders in the industry 	<ul style="list-style-type: none"> » Higher salaries than other PT Banks may impose a competitive disadvantage » No experience with external customer base and a lack of marketing/sales resources » IT-system only compatible with internal use at the moment » A disadvantageous credit rating vs. international peers may make it difficult to win international clients » Spare capacity can indicate inefficiency » Ongoing dispute between the two major shareholders of BPI might be seen as a problem for investors
<ul style="list-style-type: none"> » BPI DOIF has the opportunity to start fresh and win by setting up efficient processes » Smaller banks that already operated inefficiently will now face even higher costs » First-mover advantage in Portugal » Ability to offer diversification from larger custodians and also a "full service" with superior service level » Potential increased demand from international investors 	<ul style="list-style-type: none"> » Other large Portuguese banks win on scale and could initiate a <i>price war</i> for depositary services » Uncertainty about Portuguese non-investment credit rating » Uncertainty about demand from international investors » The European passport for funds could benefit global custodians to enter the Portuguese market and win on scale
Opportunities	Threats

Conclusions from external analysis

Appendix 8 – Decision Tree: Commercial opportunities for BPI (MECE structure)



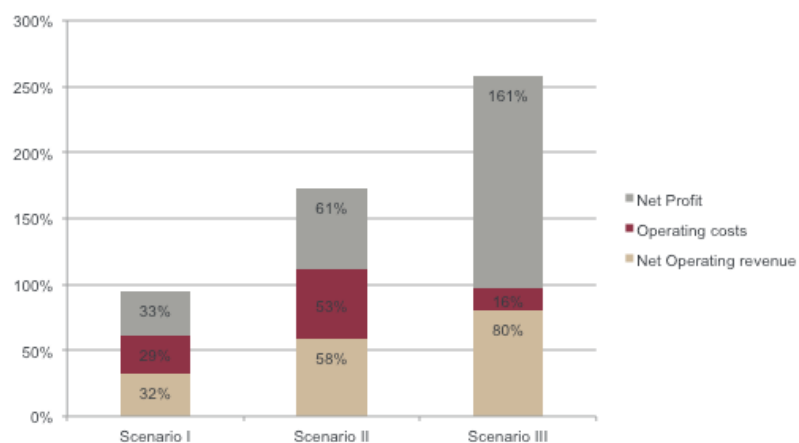
Appendix 9 – Timeline: overview of the implementation plan



Appendix 10.1 – Scenario Analysis

Income statement (in Mn €) - Scenario Analysis						
	1st half 2015	11,78% (Asset Management Dpt.)	2% DOIF	Scenario I	Scenario II	Scenario III
Net Operating revenue	587.2	69.17	1.38	1.83	2.19	2.49
Personal costs (56.68%)	189.1	22.28	0.45	0.57	0.67	0.30
Number of Employees			34	43	59.5	81.5
Other Costs	144.5	17.02	0.34	0.45	0.54	0.613
Operating costs	333.6	39.3	0.79	1.02	1.21	0.92
Operating Profit	253.6	29.87	0.59	0.81	0.98	1.58
Profits before taxes (- 62.46%)	158.4	18.66	0.37	0.51	0.61	0.99
Net Profit (-48.11%)	76.2	8.98	0.18	0.24	0.29	0.47

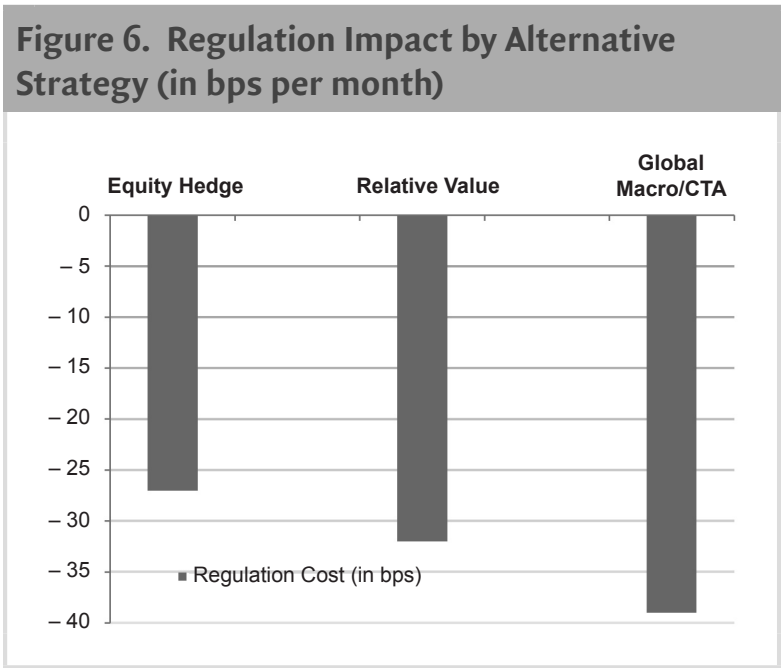
Appendix 10.2 - Scenario Analysis



Scenario I: 32% Increase

Scenario II: 58% Increase

Scenario III: 80% Increase



Source: Darolles (2014)